

AMENDMENTS TO THE CLAIMS

1. **(Currently Amended)** A single conversion type high frequency receiver comprising:

an input terminal for receiving a high frequency signal;

a filter coupled to said input terminal;

an image rejection mixer having an input part coupled to an output part of said filter -a
~~mixer of which one input part is coupled to an output part of said filter and the other input part is~~
~~coupled to an output part of a frequency variable local oscillator; and~~

an output terminal coupled to an output part of said image rejection mixer,

wherein said image rejection mixer ~~wherein said mixer is formed of an image rejection~~
~~mixer, and said filter has a moderated damping characteristic with respect to a frequency when~~
~~the image rejection mixer reduces the image~~ comprises:

a variable frequency oscillator operable to output a signal;

a first phase shifter coupled to an output part of said variable frequency oscillator;

a first mixer for mixing the output of said filter and an output of said variable
frequency oscillator;

a second mixer for mixing the output of said filter and an output of said first phase
shifter; and

a second phase shifter coupled to an output part of said first mixer,

wherein said image rejection mixer is operable to generate a signal having an
intermediate frequency, the intermediate frequency being a difference between a frequency of
the signal output by said variable frequency oscillator and a frequency of the high frequency
signal received by said input terminal;

wherein said filter is operable to pass a frequency lower than a predetermined cutoff frequency; and

wherein the predetermined cutoff frequency is a frequency not higher than a frequency higher than a third harmonic frequency of said variable frequency oscillator by approximately the intermediate frequency.

2. **(Currently Amended)** A high frequency receiver according to claim 1, further comprising a high frequency amplifier disposed between said filter and ~~the~~ said image rejection mixer.

3. **(Currently Amended)** A high frequency receiver according to claim 2, wherein said high frequency amplifier and ~~the~~ said image rejection mixer are formed of a balanced circuit, and

said high frequency amplifier and ~~the~~ said image rejection mixer are inter-coupled in balance.

4. **(Currently Amended)** A high frequency receiver according to claim ~~[[2]]~~ 1, further comprising

wherein said filter is composed of a first filter and a second filter, and

wherein a second filter disposed between said high frequency amplifier is disposed between said first filter and said second filter and the image rejection mixer,

~~wherein said second filter is formed of a single tuning circuit.~~

5. **(Currently Amended)** A high frequency receiver according to claim ~~[[2]]~~ 4, further comprising an

~~wherein said first input filter disposed between said input terminal and said high frequency amplifier, wherein said input terminal is formed of a single tuning circuit.~~

6. **(Currently Amended)** A high frequency receiver according to claim 5, further comprising

~~wherein said second a step to step filter disposed between said high frequency amplifier and the image rejection mixer, wherein said step to step filter is a fixed filter.~~

7. **(Currently Amended)** A high frequency receiver according to claim 6, wherein ~~the fixed~~ said second filter is a high-pass filter.

8. **(Currently Amended)** A high frequency receiver according to claim 6, wherein ~~the fixed~~ said second filter is a low-pass filter.

9. **(Currently Amended)** A high frequency receiver according to claim 6, wherein ~~the fixed~~ said second filter is a band-pass filter.

10. **(Currently Amended)** A high frequency receiver according to claim 6, wherein ~~the fixed~~ said second filter includes a plurality of filters, each of the plurality of filters having a different cutoff frequency, and

wherein one of the plurality of filters can be selected ~~and can switch between the filters~~ in response to a received frequency.

11. **(Withdrawn - Currently Amended)** A high frequency receiver according to claim 2,

wherein said high frequency amplifier is directly coupled to ~~the~~ said image rejection mixer.

12. **(Currently Amended)** A high frequency receiver according to claim ~~11~~ 2,

wherein said high frequency amplifier ~~has~~ includes a bipolar transistor.

13. **(Currently Amended)** A high frequency receiver according to claim 2,

wherein ~~at least both of~~ of said high frequency amplifier and ~~the~~ said image rejection mixer ~~have~~ include a transistor formed by an identical process, and ~~the~~ wherein said transistor is stored in one integrated circuit.

14. **(Withdrawn - Currently Amended)** A high frequency receiver according to claim 13,

wherein said high frequency amplifier is directly coupled to ~~the~~ said image rejection mixer.

15. **(Currently Amended)** A high frequency receiver according to claim ~~14~~ 2,

wherein said high frequency amplifier and ~~the~~ said image rejection mixer ~~have~~ include a bipolar transistor.

16-17. (Canceled)

18. (Withdrawn - Currently Amended) A high frequency receiver according to claim 17 1,

wherein said high frequency receiver is used for receiving a television broadcast,
wherein said input terminal receives a high frequency signal of the television broadcast as the high frequency signal,

wherein said filter passes a frequency in the received frequency band,

wherein said high frequency receiver comprises:

a high frequency amplifier interposed between said input terminal and said filter;
and

a switch ~~of which~~ having a common terminal that is disposed between said high frequency amplifier and said filter and is coupled to an output part of said high frequency amplifier,

wherein a first ~~one~~ output part of said switch is coupled to said filter, and ~~the~~
~~other~~ a second output part of said switch is coupled to an input part of ~~the~~ said image rejection mixer, and

wherein said switch is coupled to ~~the other~~ said second output part when a frequency not lower than the cutoff frequency of said filter is received.

19. **(Canceled)**

20. **(Withdrawn - Currently Amended)** A high frequency receiver according to claim 1, wherein a reduction amount of ~~the~~ an image by ~~the~~ said image rejection mixer is increased with respect to a specific channel having a small damping amount of a passing characteristic of said filter.

21. **(Withdrawn)** A high frequency receiver according to claim 1, wherein said filter has a variable image trap capable of damping image frequency in response to at least a received channel.

22. **(Withdrawn - Currently Amended)** A high frequency receiver according to claim 1, wherein

said filter ~~has~~ includes a first filter for passing a frequency in a VHF low band and a second filter for passing a frequency in a VHF high band, ~~the~~ said second filter being disposed in parallel with ~~the~~ said first filter,

a variable image trap is coupled to ~~the~~ said first filter, and

~~the~~ said variable image trap damps image frequency of a received channel when the VHF low band is received, and damps frequency of the VHF low band when the VHF high band is received.

23. **(Original)** A high frequency receiver according to claim 1, further comprising a high frequency amplifier disposed between said input terminal and said filter.

24. **(Withdrawn)** A high frequency receiver according to claim 23, wherein said input terminal is directly coupled to said high frequency amplifier.

25. **(Original)** A high frequency receiver according to claim 1, wherein said filter is formed of a double tuning circuit.

26. **(Original)** A high frequency receiver according to claim 1, wherein said filter is formed of a fixed filter.

27. **(Canceled)**

28. **(Withdrawn)** A high frequency receiver according to claim 1, wherein said filter has a fixed trap for damping image frequency in a VHF low band.

29. **(Withdrawn)** A high frequency receiver according to claim 28, wherein a trap frequency of the fixed trap is substantially equal to an image frequency occurring when a frequency of a substantially central channel of the VHF low band is received.

30-32. **(Canceled)**

33. **(New)** A high frequency receiver according to claim 1, wherein the predetermined cutoff frequency is higher than the third harmonic frequency of said variable frequency oscillator by approximately the intermediate frequency.